

REMARKS

I. Status of the Claims

Claims 1-35 were originally filed. Subsequently, claims 5, 8-17, and 20-35 were canceled. Upon entry of the present amendment, claim 2 is canceled, whereas claim 1 is amended to recite a 95% amino acid sequence identity to SEQ ID NO:1, to specify what "an alpha subunit" is, and to clarify that it is the "subsequence" that has at least 95% sequence identity to SEQ ID NO:1. Claims 3 and 4 are amended to replace "an amino acid sequence of SEQ ID NO:1" or "a nucleotide sequence of SEQ ID NO:3 or SEQ ID NO:4" with "the amino acid sequence of SEQ ID NO:1" and "the nucleotide sequence of SEQ ID NO:3 or SEQ ID NO:4," respectively. Claim 19 is amended to recite "[a]n isolated host cell." No new matter is introduced. Claims 1, 3, 4, 6, 7, 18, and 19 remain pending under examination.

II. Claim Rejections

A. 35 U.S.C. §112, First Paragraph: Enablement

Claims 1-4, 6, 18, and 19 were rejected under 35 U.S.C. §112, first paragraph, for alleged lack of enablement. Specifically, the Examiner asserted that the specification, while enabling for a nucleic acid encoding a polypeptide having at least 95% sequence identity to SEQ ID NO:1, is not enabling for a nucleic acid encoding a polypeptide having at least 85% or 90% sequence identity to SEQ ID NO:1. The Examiner also objected to the terms "an amino acid sequence of SEQ ID NO:1" and "a nucleotide sequence of SEQ ID NO:3 or SEQ ID NO:4" in claims 3 and 4, respectively, for encompassing partial sequences. In addition, the Examiner objected to claim 19 for encompassing a host cell that is a part of a multicellular, transgenic organism.

Although Applicants do not agree with the Examiner, to expedite prosecution, the pertinent claims have been amended: claim 1 now recites "at least 95% amino acid sequence identity to SEQ ID NO:1," which is a limitation of claim 7, a claim not rejected for enablement reasons. Claims 3 and 4 are amended to replace the "an" or "a" before the terms "amino acid sequence of SEQ ID NO:1" or "nucleotide sequence of SEQ ID NO:3 or SEQ ID NO:4." Claim

19 is amended to recite "[a]n isolated host cell." Because the Examiner has acknowledged the proper enablement of claim 7, which contains the language of 95% sequence identity, Applicants submit that the pending claims should no longer be rejected on the ground of insufficient enablement. The withdrawal of this rejection is respectfully requested.

B. 35 U.S.C. §112, First Paragraph: Written Description

Claims 1-4, 6, 18, and 19 were also rejected under 35 U.S.C. §112, first paragraph, for alleged inadequate written description. Specifically, the Examiner asserted that the specification does not adequately describe a nucleic acid encoding a polypeptide having at least 85% or 90% sequence identity to SEQ ID NO:1. The Examiner also objected to the terms "an amino acid sequence of SEQ ID NO:1" and "a nucleotide sequence of SEQ ID NO:3 or SEQ ID NO:4" in claims 3 and 4, respectively, for encompassing partial sequences. On the other hand, the Examiner did not reject claim 7 on the written description grounds.

In spite of Applicants' disagreement with the Examiner, claim amendment has been made to expedite prosecution: claim 1 now recites the limitation from claim 7, *i.e.*, at least 95% amino acid sequence to SEQ ID NO:1. Also, the language of "a(n)" sequence in claims 3 and 4 has been rewritten as "the" sequence. Since claim 7 has been deemed properly described under 35 U.S.C. §112, first paragraph, Applicants believe that the amended claims should also be held properly described. As such, the withdrawal of the written description rejection is respectfully requested.

C. 35 U.S.C. §112, Second Paragraph

Claim 1 was rejected for alleged indefiniteness for reciting "an alpha subunit." The claim has been amended to recite "one cyclic nucleotide-gated channel (CNG) alpha subunit" as suggested by the Examiner. This rejection is thus overcome.

Claims 1 and 2 were rejected for reciting a polypeptide "comprising a subsequence having at least X% sequence identity to SEQ ID NO:1." The Examiner asserted that this language makes it unclear whether it "refers to a polypeptide that comprises a sequence that shares at least X% sequence identity to SEQ ID NO:1 or if it refers to a fragment of a

polypeptide that shares at least X% sequence identity to SEQ ID NO:1" (see the paragraph bridging pages 14 and 15 of the Office Action mailed February 7, 2006). Claim 2 has been canceled. Claim 1 is amended to recite that "the polypeptide ... comprising a subsequence that has at least 95% amino acid sequence identity to SEQ ID NO:1." This language clearly indicates that it is the subsequence, not the polypeptide, that has the "at least 95% amino acid sequence identity to SEQ ID NO:1." Any potential ambiguity is removed by this amendment. The indefiniteness rejection on this particular ground is overcome.

Claims 3 and 4 were rejected for alleged indefiniteness for the recitation of "an amino acid sequence of SEQ ID NO:1" and "a nucleotide sequence of SEQ ID NO:3 or SEQ ID NO:4," respectively. Since the word "an" or "a" has been replaced with the word "the" in these claims, this rejection is overcome.

CONCLUSION

In view of the foregoing, Applicants believe all claims now pending in this Application are in condition for allowance and an action to that end is respectfully requested.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 415-576-0200.

Respectfully submitted,



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